B. Grant Logan Director HIFS-VNL
Title: Heavy-Ion Driven IFE
Abstract:
Accelerators have long been considered attractive options for inertial fusion energy, and the upcoming NAS review will soon revisit the candidacy of heavy ion fusion.

There are three types of heavy ion fusion targets that set requirements on the accelerator: indirect drive, direct drive (polar drive with shock ignition), and direct-drive fast ignition (X-target, as well as several types of accelerators and target chamber options. A tri lab consortium of LANL, LBNL, and LLNL successfully completed a large induction linac (DARHT-II) for radiography at LANL in 2008, which validates many features of induction linacs that could be applied to heavy ion fusion. The X-target may expand accelerator options for heavy ion fusion to include high gradient RF linacs. A Workshop on Accelerators for Heavy Ion Fusion is being planned for this coming spring (see Peter Seidl [PASeidl@lbl.gov]) to take a fresh look at accelerator-driven inertial fusion.

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